

## What do hearing aids do?

The most common misconception about hearing aids is that they provide normal hearing to their wearers—this is NOT SO!

Unlike eyeglasses which can restore vision to 20/20, hearing aids amplify and shape incoming sounds to take advantage of the remaining healthy portions of the auditory system.

Though hearing aids come in all shapes and sizes, they all have the same basic components.

Sound is picked up from the environment by a microphone which changes the sound from an acoustic signal to an electronic signal. This signal is then processed and amplified by the hearing aid.

The hearing aid receiver then changes the electronic signal back into sound and directs it into the ear canal via an ear mold or the hearing aid body itself.



State of North Carolina • Pat McCrory, Governor

Department of Health and Human Services • Aldona Z. Wos, M.D., Secretary

Division of Services for the Deaf and the Hard of Hearing

[www.ncdhhs.gov/dsdhh](http://www.ncdhhs.gov/dsdhh)

N.C. DHHS is an equal opportunity employer and provider.

Revised 4/15

## Realistic Expectations for Use of Hearing Aids

### Hearing Aids:

- **CAN** significantly improve hearing.  
**CANNOT** miraculously provide normal hearing to impaired ears.
- **CAN** provide clearer and better sound quality.  
**CANNOT** provide true hi-fi sound quality.
- **CAN** allow easier communication in many environments.  
**CANNOT** provide perfect communication in all environments.

In addition to speech, hearing aids amplify sounds in the environment, including wind, rustling clothing and background noise. Hearing aids require regular care and maintenance. Also, periodic adjustments by an audiologist or hearing aid dispenser may be necessary as your hearing changes.

*For more information please contact the following DSDHH staff specialist:*



N.C. Division of Services  
for the Deaf and the Hard of Hearing

## An Introduction to Hearing Aids

*What are they?  
What can they do for you?*

**N.C. Division of Services  
for the  
Deaf and the Hard of Hearing**

2301 Mail Service Center

1100 Navaho Dr., GL-3

Raleigh, NC 27699-2301

**(919) 874-2212 V/TTY**

**(919) 890-0859 VP**

**(800) 851-6099 V/TTY**

**(919) 855-6872 Fax**

**[www.ncdhhs.gov/dsdhh](http://www.ncdhhs.gov/dsdhh)**

## Types of Hearing Aids

Your hearing health care provider will discuss the right style of hearing aid needed based on your hearing loss. The four main styles of hearing aids are behind-the-ear; in-the-ear; in-the-canal; and completely in-the canal.

### Behind-the-Ear (BTE) hearing aid:

- Consists of an ear mold, tubing, ear hook and hearing aid body.
- Offers a wide variety of options: Telecoil, directional microphones and multiple listening programs.
- Allows for easy insertion and removal.

### In-the-Ear (ITE) hearing aid:

- Easier for some people to insert in ear.
- Hearing aid is firmly seated in the user's ear.
- Allows some flexibility and options including directional microphone, telecoil and multiple listening programs.
- Custom designed hearing aid.

### In-the-Canal (ITC) hearing aid:

- Smaller and less powerful than BTE and ITE hearing aids.
- Most often chosen for cosmetic reasons as they are less visible than BTE and ITE hearing aids.

- Things to consider with ITC hearing aids include: shorter battery life and problematic for users with dexterity issues.
- No telecoil can be installed.

### Completely-in-the-Canal (CIC) hearing aid:

- Smallest and least powerful of all hearing aids.
- Completely fits in the ear canal.
- Things to consider with CIC hearing aids: invisible, not appropriate for persons with significant hearing losses or decreased dexterity.

## Hearing Aid Technology

**Digital Hearing aids:** The most advanced technology. Converts incoming sounds to digital form. This allows for more precise and higher quality sound. Custom tailored to the user's hearing loss through computer adjustment. More expensive technology than conventional.

**Conventional Hearing aids:** The oldest and least expensive form of technology. A commonly prescribed hearing aid, it has an analog signal and user controlled volume. Fine tuning is done manually; thus has limited flexibility. Trends now are to go away from this technology to the more advanced digital.

## Common Hearing Aid Features

**Telecoil:** Allows clear reception from telephone signals and closed loop FM systems. Makes the hearing aid and telephone compatible in working together.

**Directional Microphones:** BTE and ITE hearing aids have two microphones; one microphone can be turned off to help listeners in noisy places. Useful in places with a lot of background noise.

**Multiple programs:** User selects from several settings depending on listening to environmental sounds. Allows one-button access to frequently used functions (i.e.—telecoil, microphone, etc.)

***Medicare and other health insurances will pay for hearing evaluations under proper circumstances. However, these same insurances may not cover the costs of the hearing aids. Check with your insurance company for any hearing aid coverage benefit. If you think that you need hearing aids, see your primary care physician for a referral to a hearing health care professional for further testing.***